AMENDMENTS TO THE CLAIMS

Claims 1- 9 (canceled)

10. (currently amended) An interferential current treatment apparatus comprising:

a first electrical circuit having a first current source, a first variable base frequency, ~~a first beat frequency,~~ and a first pair of treatment electrodes, wherein the first pair of treatment electrodes are configured for selective coupling to opposing sides of a patient's body with respect to a spinal column of the patient to allow the first electrical circuit to interact with and stimulate a nerve span of the patient's spinal column;

a second electrical circuit having a second current source, a second variable base frequency, ~~a second beat frequency,~~ and a second pair of treatment electrodes, wherein the second pair of treatment electrodes are configured for selective coupling to opposing sides of the patient's body with respect to the spinal column of the patient to allow the second electrical circuit to interact with and stimulate the nerve span of the patient's spinal column, and wherein the second base frequency is within 200 Hertz of the first base frequency when attached to the patient, wherein a first interferential beat frequency is established between the first and second electrical circuits;

a third electrical circuit having a third current source, a third variable base frequency, ~~a third beat frequency,~~ and a third pair of treatment electrodes, wherein the third pair of treatment electrodes are configured for selective coupling to opposing sides of the patient's body with respect to the spinal column of the patient to allow the third electrical circuit to interact with and stimulate the nerve span of the patient's spinal

column, and wherein the third base frequency is greater than the first base frequency by at least 500 Hz when attached to the patient; and

a fourth electrical circuit having a fourth current source, a fourth variable base frequency, ~~a fourth beat frequency,~~ and a fourth pair of treatment electrodes, wherein the fourth pair of treatment electrodes are configured for selective coupling to opposing sides of the patient's body with respect to the spinal column of the patient to allow the fourth electrical circuit to interact with and stimulate the nerve span of the patient's spinal column, and wherein the fourth base frequency is no more than 200 Hertz greater than the third base frequency when attached to a patient, wherein a second interferential beat frequency is established between the third and fourth electrical circuits.

11. (previously amended) The apparatus according to claim 10 further comprising frequency varying means coupled to the first, second, third and fourth current sources to vary a beat frequency of at least one of the electrical circuits relative to another of the electrical circuits during use.

12. (previously amended) The apparatus according to claim 10 wherein the first inferential beat frequency is 2-6 Hz.

13. (previously amended) The apparatus according to claim 12 wherein the second inferential beat frequency is 8-12 Hz.

14. (previously amended) The apparatus according to claim 10 wherein the first base frequency is set generally at 1850 Hertz.

15. (previously amended) The apparatus according to claim 11 wherein a frequency varying means selectively varies the beat frequency either before treatment or during treatment of the patient.

16. (previously amended) The apparatus according to claim 10 further comprising means for displaying the frequencies and elapsed time of use of each of the current sources.

17. (previously amended) The apparatus according to claim 10 wherein an interferential beat frequency is established between the first electrical circuit and the third electrical circuit.

18. (previously amended) The apparatus according to claim 10 wherein at least some of the current sources are alternating current sources and a signal generator applies a frequency on the alternating current of the alternating current sources.

19. (previously amended) The apparatus according to claim 18 further comprising display and control means, coupled to the signal generator, to enable an operator to control a current level and frequency of each current source and to display the same to the operator.

Claims 20 – 28 (canceled)